30 MAY 1955

AMERICAN MATHEMATICAL SOCIETY

Math. Econ
QA
1
.A512 no.
no. 9

Notices

UNIVERSITY OF MICHIGAN
AUG 13 1956
MATH. ECON. LIBRARY

Edited by J. H. CURTISS

ISSUE NUMBER 9 APRIL 1955

Contents

MEETINGS

Calendar of Meetings 2

Program of the April Meeting in Brooklyn, New York 3

Program of the April Meeting in Chicago, Illinois 11

Program of the April Meeting in Stanford, California 17

NEWS ITEMS AND ANNOUNCEMENTS 20

PERSONAL ITEMS 26

NEW PUBLICATIONS 28

MEMORANDUM TO MEMBERS

Directory Changes 31

Published by the Society

MENASHA, WISCONSIN, AND PROVIDENCE, RHODE ISLAND

Printed in the United States of America

AMERICAN MATHEMATICAL SOCIETY

Entered as second class

CALENDAR OF MEETINGS

Meeting No.	Date	Place	Deadline for Abstracts
515	June 18, 1955	Vancouver, British Columbia	May 5
516	August 30–September 3, 1955 (60th Summer Meeting)	Ann Arbor Michigan	July 18
517	October 29, 1955	College Park, Maryland	Sept. 15*
518	November 18–19, 1955	Knoxville, Tennessee	Oct. 15*
	November 25–26, 1955	Milwaukee, Wisconsin	Oct. 15*
	(Date not set)	Far West (place not set)	*
	December 27–30, 1955 (62nd Annual Meeting)	Houston, Texas	Nov. 14

* Provisional

The Notices of the American Mathematical Society is published seven times a year, in February, April, June, August, October, November, and December. Inquiries should be addressed to the American Mathematical Society, 450 Ahnaip Street, Menasha, Wis., or 80 Waterman Street, Providence 6, R.I.

Entered as second-class matter at the post office at Menasha, Wisconsin. Authorization is granted under the authority of the act of August 24, 1912, as amended by the act of August 4, 1947 (Sec. 34.21, P. L. & R.). Accepted for mailing at the special rate of postage provided for in section 34.40, paragraph (d).

Items for Notes should be sent to Notices of the American Mathematical Society, 80 Waterman Street, Providence 6, R.I.

FIVE HUNDRED TWELFTH MEETING

Brooklyn, New York

April 14–16, 1955

PROGRAM

The five hundred twelfth meeting of the American Mathematical Society will be held on Thursday, Friday, and Saturday, April 14–16, 1955, at the Polytechnic Institute of Brooklyn, which is celebrating its Centennial Year. A Symposium on Mathematical Probability and its Applications (sponsored by the Society and the Office of Ordnance Research) will be held on Thursday and Friday. *All sessions will be held in the A building, 99 Livingston Street.*

Sessions of the Symposium will be held at 10:00 A.M. and at 2:00 P.M. on Thursday, and at 10:00 A.M. on Friday. These sessions will all take place in the Lounge on the first floor of the A building.

By invitation of the Committee to Select Hour Speakers for Eastern Sectional Meetings, Professor R. D. Schafer of the University of Connecticut will address the Society on Friday at 2:00 P.M. on *Structure and representation of nonassociative algebras*, and Professor Åke Pleijel of the University of Lund and the University of Maryland will address the Society on Saturday at 2:00 P.M. on *Eigenfunction distribution for polar differential equations*. Both lectures will be given in the Lounge on the first floor.

Sessions for contributed papers will be held at 3:15 P.M. on Friday, and at 10:00 A.M. and at 3:15 P.M. on Saturday.

There will be a tea in the Lounge on the first floor starting at 4:30 P.M. on Friday.

The Council of the Society will meet in room A–355 on Friday at 5:15 P.M., and reconvene after dinner.

Professor T. R. Hollcroft will be in charge of the Employment Register, which will be maintained in room A–255.

The Polytechnic Institute of Brooklyn is located at 99 Livingston Street, between Court Street and Boerum Place, one block south of Brooklyn's Borough Hall. The Institute may be reached by the Broadway-

7th Avenue or the Lexington Avenue line of the IRT subway at the Borough Hall Station; by the 6th or 8th Avenue IND line at the Jay-Boro Hall Station; and by the BMT line at the Court Street-Boro Hall Station.

A registration desk will be found near the regular sessions of the meeting, at 99 Livingston Street. A map of the Borough Hall section of Brooklyn and a list of recommended restaurants will be available there.

Parking is difficult at all times in the crowded Borough Hall district. If driving is necessary, public parking facilities are available at Smith and Schermerhorn Streets, three blocks from the Institute's main building. The parking fee is $1.00 per day.

Committee on Arrangements

R. M. Foster, *Chairman*

S. P. Hoffman, Jr. R. D. Schafer

J. P. Russell Seymour Schuster

SYMPOSIUM ON MATHEMATICAL PROBABILITY AND ITS APPLICATIONS

Note: All sessions of the Symposium will take place in the Lounge of the A building, 99 Livingston Street.

THURSDAY, 10:00 A.M.

Session A. Diffusion

Chairman: Professor Shizuo Kakutani

(1) Brownian motion depending on five parameters
Professor Paul Lévy

(2) A new look at the Dirichlet problem
Professor J. L. Doob

(3) Probability and differential equations
Professor William Feller

THURSDAY, 2:00 P.M.

Session B. Turbulance

Chairman: Professor Salomon Bochner

(1) Mathematical remarks on the origin of turbulence
Professor Eberhard Hopf

(2) Stochastic processes of interest in statistical astronomy
Professor Guido Münch

(3) The singularity in the spectrum of homogeneous turbulence
Professor G. K. Batchelor

FRIDAY, 10:00 A.M.

Session C. Probability in Classical and Modern Physics

Chairman: Professor G. E. Uhlenbeck

(1) Probability in classical physics
Professor Mark Kac

(2) Infinite models in physics
Dr. S. M. Ulam

(3) Quantum theory and the foundations of probability
Professor B. O. Koopman

PROGRAM OF THE OTHER SESSIONS
(Time limit for each contributed paper, 10 minutes)

FRIDAY, 2:00 P.M.

General Session, Lounge

Structure and representation of nonassociative algebras (One hour)
Professor R. D. Schafer, University of Connecticut

FRIDAY, 3:15 P.M.

Session on Analysis, Room A–259

(1) Inductive limits of normed algebras
Mr. Seth Warner, Harvard University

(2) Certain abelian rings of operators l_p
Dr. G. L. Krabbe, Purdue University

(3) The Bernstein-Hausdorff-Widder theorem for locally compact abelian semigroups
Mr. A. E. Nussbaum, University of Connecticut

(4) On self-adjoint differential equations with non-selfadjoint boundary conditions. Preliminary report
Professor František Wolf, University of California, Berkeley

(5) Uniform approximation by polynomials in two complex variables
Professor Walter Rudin, University of Rochester

(6) Note on Friedrichs extensions
Professor Tosio Kato, New York University

(7) Maximal theorems for solutions of the heat equation
Dr. F. W. Gehring, Harvard University

Session on Statistics and Probability, and Topology, Room A–253

(8) A characterisation of the gamma distribution
Dr. Eugene Lukacs, Office of Naval Research

(9) A limit theorem for the maximum of normalized sums of independent random variables
Professor D. A. Darling, University of Michigan, and Professor Paul Erdös, University of Notre Dame

(10) The intersection of convex sets
Mr. A. B. Novikoff, Johns Hopkins University

(11) A generalization of the Borsuk and Borsuk-Ulam theorems
Dr. W. T. Kyner, Northwestern University

(12) A fixed point theorem
Professor Eldon Dyer, University of Georgia

(13) A note concerning the imbedding of upper semicontinuous collections of continua in continuous collections of continua
Professor Mary-Elizabeth Hamstrom, Goucher College

(14) On a class of 3-manifolds and the bioduplication problem
Mr. Fred Supnick, City College, New York

SATURDAY, 10:00 A.M.

Session on Applied Mathematics, Room A–259

(15) Inequalities involving cylindrical functions
Mr. K. M. Siegel and Mr. T. B. Curtz, University of Michigan

(16) An estimate of the error due to modified boundary conditions in the Blasius differential equation
Dr. L. A. Rubel, Cornell University

(17) On a homogeneous two-dimensional low-pass filter
Professor M. S. Klamkin, Polytechnic Institute of Brooklyn

(18) An approximate solution, by method of averages, of a differential equation for flow in a tube with normal fluid injection at wall
Professor Morris Morduchow, Polytechnic Institute of Brooklyn

(19) Bounds for the torsional rigidity of a composite beam
Professor L. E. Payne, University of Maryland

(20) Lower bounds for minima by finite difference methods
Professor H. F. Weinberger, University of Maryland

(21) A modified Jacobi method for diagonalizing symmetric matrices
Dr. C. B. Tompkins, University of California, Los Angeles

Session on Analysis, Algebra and Theory of Numbers, Room A–253

(22) Periodic solutions of a nonlinear wave equation. II
Dr. B. A. Fleishman, Johns Hopkins University

(23) On the accuracy of the adjoint method of differential corrections
Dr. Mark Lotkin, RCA Service Company, Inc.

(24) An extension problem for functions with monotonic derivatives
Professor W. B. Jurkat, University of Cincinnati

(25) Non-oscillation and integrability of solutions of a class of fourth-order differential equations
Dr. J. L. Howell, University of Delaware

(26) Characteristic roots of certain matrices. Preliminary report
Professor Emilie V. Haynsworth, Wilson College

(27) On locally nilpotent groups
Dr. K. A. Hirsch, University of Colorado

(28) The summation which forms the basis for proving both Fermat theorems
Mr. Abraham Brind, New York, New York

SATURDAY, 2:00 P.M.

General Session, Lounge

Eigenfunction distribution for polar differential equations (One hour)
Professor Åke Pleijel, University of Lund and University of Maryland

SATURDAY, 3:15 P.M.

Session on Analysis, Room A–259

(29) A hyperbolic surface in 3-space
Mr. Robert Osserman, Harvard University

(30) Reconstruction of meromorphic modifications by σ-processes
Dr. Wilhelm Stoll, University of Pennsylvania and University of Tübingen
(Introduced by Professor W. H. Gottschalk)

(31) On the zeros of successive derivatives
Professor Albert Edrei, Syracuse University

(32) A variational method in the theory of harmonic integrals. II
Professor C. B. Morrey, Jr., University of California, Berkeley, and Institute for Advanced Study

(33) On the maximum modulus of a function of exponential type in a half-plane
Dr. Paul Malliavin, Institute for Advanced Study

(34) Logarithmic sequences
Professor Joseph Milkman, United States Naval Academy

(35) On the minimum maximorum and maximum minimorum of a polynomial whose all zeros are real
Professor Joseph Andrushkiw, Seton Hall University

Session on Geometry, Logic and Foundations, Room A–253

(36) The collineation groups of the finite planes $EG(2, 3)$ and $PG(2, 3)$
Professor H. S. M. Coxeter, University of Toronto

(37) A theorem on skew pentagons
Dr. Jesse Douglas, Columbia University

(38) Pencils of polarities in projective space. I
Professor Seymour Schuster, Polytechnic Institute of Brooklyn

(39) Indicatrix of calculus of variations and Finsler geometry
Professor Valdemars Punga, Rensselaer Polytechnic Institute

(40) Differentiable points of arcs in conformal n-space
Professor N. D. Lane, Hamilton College, McMaster University

(41) Extension of the solution of the imbedding problem to open Riemannian manifolds
Professor J. F. Nash, Massachusetts Institute of Technology

(42) Computational methods in symbolic logic
Dr. R. S. Ledley, Johns Hopkins University

SUPPLEMENTARY PROGRAM
(To be presented by title)

(43) Forced heat convection in laminar flow through a tube
Dr. Milton Abramowitz, National Bureau of Standards, Washington, D. C.

(44) Polynomial solutions in laminated orthotropic plane strain
Professor R. B. Blake, University of Florida

(45) On semi-simple automorphisms of Lie algebras
Professor Armand Borel, University of Chicago and Professor G. D. Mostow, Johns Hopkins University

(46) Distribution of matrices in a finite field with respect to characteristic polynomial and invariant factors
Professor Leonard Carlitz and Dr. J. H. Hodges, Duke University

(47) Note on the class number of real quadratic fields
Professor Leonard Carlitz, Duke University

(48) On the representation of an integer as the sum of twenty-four squares
Professor Leonard Carlitz, Duke University

(49) An extension theorem for completely regular spaces
Professor H. S. Collins, Louisiana State University

(50) The distribution of certain functionals of Markoff processes
Professor D. A. Darling, University of Michigan, and Professor A. J. Siegert, Northwestern University

(51) On spaces without isolated non cut points
Dr. E. R. Fadell, Harvard University

(52) Bounds and asymptotic behavior of coefficient in the series $\log e^x e^y$
Mr. Karl Goldberg, National Bureau of Standards, Washington, D. C.

(53) On local balance and N-balance of a signed graph
Professor Frank Harary, University of Michigan

(54) Explicit values and applications of certain exponential sums in a finite field
Dr. J. H. Hodges, Duke University

(55) A system of homogeneous spherical harmonics
Professor Ernest Ikenberry, Alabama Polytechnic Institute

(56) Pseudo-main solutions
Dr. J. R. Isbell, Aberdeen Proving Ground, Maryland

(57) On the spectra of certain operators on l_p"
Dr. G. L. Krabbe, Purdue University

(58) An eigenvalue inequality for the product of normal matrices
Dr. M. D. Marcus, University of British Columbia

(59) Note on matrix inequalities
Dr. M. D. Marcus, University of British Columbia

(60) A remark on stability
Dr. M. D. Marcus, University of British Columbia

(61) On Stieltjes integration
Professor E. J. McShane, University of Virginia

(62) Signal representation in terms of periodic functions
Professor K. S. Miller, New York University and Professor L. A. Zadeh, Columbia University

(63) Fully reducible subgroups of algebraic groups
Professor G. D. Mostow, Johns Hopkins University

(64) Self-adjoint groups
Professor G. D. Mostow, Johns Hopkins University

(65) Unimodular circulants of rational integers
Dr. Morris Newman and Dr. Olga Taussky, National Bureau of Standards, Washington, D. C.

(66) On the ends of knot groups
Dr. C. D. Papakyriakopoulos, Princeton University

(67) A fixed point theorem for continuous multivalued transformations
Professor R. L. Plunkett, Florida State University

(68) On the two-adic density of representations by quadratic forms
Dr. Irma M. Reiner, Princeton, New Jersey
(Introduced by Professor Irving Reiner)

(69) On finite projective games
Professor Moses Richardson, Brooklyn College

(70) On a complete system of semi tensors obtained by noncommutative symbolic multiplication
Mr. L. B. Robinson, Baltimore, Maryland

(71) Maximal subalgebras in spaces of continuous functions
Professor Walter Rudin, University of Rochester

(72) Groups with abelian derived groups
Professor E. V. Schenkman, Louisiana State University

(73) Pencils of polarities in projective space. II
Professor Seymour Schuster, Polytechnic Institute of Brooklyn

(74) Tensor algebras over Hilbert spaces. II
Professor I. E. Segal, University of Chicago

(75) Generalized Laplacians and the Abel summatic of multiple trigonometric series
Professor V. L. Shapiro, Rutgers University and The Institute for Advanced Study

(76) The generation of Coulomb wave functions by means of recurrence relations
Miss Irene A. Stegun and Dr. Milton Abramowitz, National Bureau of Standards, Washington, D. C.

(77) Metrisability of decomposition spaces
Dr. A. H. Stone, The University, Manchester, England

R. D. Schafer
Associate Secretary

Storrs, Connecticut
March 4, 1955

FIVE HUNDRED THIRTEENTH MEETING

Chicago, Illinois

April 22–23, 1955

PROGRAM

The five hundred thirteenth meeting of the American Mathematical Society will be held at the University of Chicago, Chicago, Illinois, on Friday and Saturday, April 22–23, 1955. *All sessions will be held in Eckhart Hall.*

Registration will be in the Common Room on the second floor of Eckhart Hall, beginning at 9:00 A.M., Friday.

By invitation of the Committee to Select Hour Speakers for Western Sectional Meetings, Professor A.H. Taub will address the Society on the topic *Determination of flows behind shock waves*. Professor Taub's lecture will be held in Room 133 at 2:00 P.M. on Friday, April 22.

Sessions for the presentation of contributed papers will be held at 10:00 A.M. on Friday and Saturday, and 3:15 P.M. on Friday.

There will be a special session on Saturday for the presentation of papers which failed to meet the deadline. Further details will be available at the registration desk. (If a contributing author fails to find his paper on this program he may conclude that the abstract did not meet the deadline.)

There will be a tea in the Common Room of Eckhart Hall starting at 4:15 P.M. on Friday.

The facilities of Hutchinson Commons, a dining hall directly across from Eckhart Hall, will be available to members of the Society and guests for all meals.

The files of the Mathematical Sciences Employment Register will be available throughout the meeting in Room 207. Professor James Ward will be in charge.

The following hotels have agreed to accommodate those members of the Society making reservations in advance:

	Single	Double
In the University district		
Shoreland Hotel 5454 South Shore Drive	$7.50–8.00	$9.50–10.00
Del Prado Hotel 5307 S. Hyde Park Blvd.	6.00–8.00	8.00–12.00
Hotels Windermere 1642 East 56th Street	6.50–7.50	8.50–10.00
Hotel Broadview 540 S. Hyde Park Blvd.	3.50–5.00	6.00–8.00
Hotel Miramar 6218 S. Woodlawn	3.25–4.50	4.50–6.00
Hyde park Y.M.C.A. 1400 East 53rd Street	2.25	
In the Loop district		
The Conrad Hilton	6.50–10.00	8.50–16.00

Reservations should be made directly with the hotel.

Eckhart Hall is located at the corner of 58th Street and University Avenue. It may be reached from the Loop district either via the Illinois Central Electric Train, in which case one leaves the train at 57th Street and walks west, or via the Jackson Park Elevated Train, in which case one leaves the train at University Avenue and walks north.

Mail and telegrams for those attending the meeting should be addressed: Care of the Department of Mathematics, Eckhart Hall, Room 313, University of Chicago, Chicago 37, Illinois.

PROGRAM OF THE SESSIONS

(Time limit for each contributed paper, 10 minutes)

FRIDAY, 10:00 A.M.

Session on Analysis, Room 133

(1) Bounds on polynomials
Professor J. H. B. Kemperman, Purdue University

(2) Generalized primitives and n-convex functions
Professor R. D. James, Michigan State College

(3) A hypergeometric solution of the equation $x^n = px - q$
Professor J. S. Frame, Michigan State College

(4) Submethods of a matrix summability method
Professor Casper Goffman and Dr. G. M. Petersen, University of Oklahoma

(5) Isomorphism of substantial rings of operators
Dr. E. L. Griffin, Jr., University of Michigan

(6) The qualitative behavior of integral curves of systems of three differential equations near a singular point
Professor R. E. Zindler, The Pennsylvania State University

Session on Logic and Algebra, Room 202

(7) Cylindric and polyadic algebras. Preliminary report
Mr. B. A. Galler, University of Chicago

(8) Note on S-matrices
Dr. L. M. Weiner, De Paul University

(9) A generalization of the Wedderburn-Malcev theorem to infinite dimensional algebras
Dr. R. B. Reisel, Loyola University

(10) Simple power-associative algebras of degree two
Professor L. A. Kokoris, University of Washington

(11) Sufficient conditions for a genus of indefinite ternary quadratic forms to contain only one class
Dr. P. J. McCarthy, University of Notre Dame

(12) On ranks in regular rings. Preliminary report
Professor Oswald Wyler, University of New Mexico

(13) Planar division neo-rings
Mr. D. R. Hughes, University of Wisconsin

FRIDAY, 2:00 P.M.

General Session, Room 133

Determination of flows behind shock waves (One hour)
Professor A. H. Taub, University of Illinois

FRIDAY, 3:15 P.M.

Session on Algebra, Room 133

(14) Inessential discriminant divisors of normal quartic fields
Professor Leonard Tournheim, University of Michigan

(15) New classes of simple Lie algebras
Professor A. A. Albert, University of Chicago and Mrs. M. S. Frank, Princeton University

(16) Classes of maximum numbers associated with symmetric equations in n reciprocals
Professor H. A. Simmons, Northwestern University

(17) Some extensions of normal subgroups in a class of semidirect products
Professor Franklin Haimo, Washington University

(18) On the replacibility of partial differential equations by ordinary ones in fields of prime characteristic
Professor Arno Jaeger, University of Cincinnati

Session on Applied Mathematics, Statistics and Analysis, Room 202

(19) Distributions defined by fundamental sequences. II. The definite integral
Professor Jacob Korevaar, University of Wisconsin

(20) Numerical evaluation of multiple integrals. Preliminary report
Professor P. C. Hammer and Mr. A. W. Wymore, University of Wisconsin

(21) A condition for existence of moments of infinitely divisible distributions
Dr. J. M. Shapiro, The Ohio State University

(22) Some sufficient conditions for a determinate Hamburger moment sequence
Professor F. M. Wright, Iowa State College

(23) Some commutation relations in a Hilbert space
Mr. W. A. Beck, Purdue University

SATURDAY, 10:00 A.M.

Session on Topology, Room 133

(24) An extension of a deformation theorem of Alexander's
Professor D. E. Sanderson, Iowa State College

(25) Generalized almost complex structures. Preliminary report
Mr. Jerome Spanier, University of Chicago

(26) On mappings and their derivatives in locally convex topological vector spaces
Mr. Jesus Gil de Lamadrid, University of Michigan

(27) Mapping degree in Banach spaces and spectral theory
Professor E. H. Rothe, University of Michigan

(28) Fixed ideals and automorphisms of certain function rings
Dr. L. E. Pursell, The Ohio State University

(29) On weak compactness in functional analysis
Mr. A. W. Wymore, University of Wisconsin

SUPPLEMENTARY PROGRAM
(To be presented by title)

(30) An upper semicontinuous decomposition of E^3 into points and tame arcs whose decomposition space is not E^3
Professor R. H. Bing, University of Wisconsin

(31) Some theorems on the projective geometry of surfaces
Professor John De Cicco, De Paul University

(32) A class of consistent summability methods
Professor Casper Goffman and Dr. G. M. Petersen, University of Oklahoma

(33) Relative irreducibility of polynomials in a skewfield. Preliminary report
Professor A. A. Grau, University of Oklahoma

(34) The connectedness concept in general topology
Professor P. C. Hammer, University of Wisconsin

(35) A common abstraction of Boolean algebras and l-groups. Preliminary report
Mr. J. A. Kalman, Harvard University

(36) Some results in lattice theory. Preliminary report
Mr. J. A. Kalman, Harvard University

(37) On some tests for treatment effects in paired replicates
Dr. H. S. Konijn, University of California, Berkeley

(38) Distributions defined by fundamental sequences. III. Convergence, multiplication and division
Professor Jacob Korevaar, University of Wisconsin

(39) Fixed ideals and automorphisms of certain rings of real-valued continuous functions
Dr. L. E. Pursell, The Ohio State University

(40) On the characteristic polynomial of the product of several matrices
Dr. W. E. Roth, Mississippi City, Mississippi

(41) On the foundations of metrical geometry
Dr. A. R. Schweitzer, Lake Forest, Illinois

(42) A bond between the foundations of geometry and transformation group theory. I
Dr. A. R. Schweitzer, Lake Forest, Illinois

(43) A bond between the foundations of geometry and transformation group theory. II

Dr. A. R. Schweitzer, Lake Forest, Illinois

(44) A recurrence relation for ultraspherical polynomials. Preliminary report

Professor M. S. Webster, Purdue University

(45) A note on L. E. Reizin's paper *Behavior of systems of three differential equations near a singular point*

Professor R. E. Zindler, The Pennsylvania State University

J. W. T. Youngs
Associate Secretary

Bloomington, Indiana
March 9, 1955

FIVE HUNDRED FOURTEENTH MEETING

Stanford, California

April 30, 1955

PROGRAM

The five hundred fourteenth meeting of the American Mathematical Society will be held at Stanford University, California, on Saturday, April 30, 1955.

By invitation of the Committee to Select Hour Speakers for Far Western Sectional Meetings, Professor Irving Kaplansky of the University of Chicago and University of California, Los Angeles, will deliver an address entitled *Operator algebras*. This address will be given at 2:00 P.M. in Room 90, Philosophy Building.

There will be a session for contributed papers at 10:00 A.M. in Room 90, Philosophy Building, near which the registration desk will be located. A session for late papers will be arranged if necessary, and the details and list of papers to be presented therein will be available at the registration desk.

The files of the Mathematical Sciences Employment Register will be available throughout the meeting.

There are numerous excellent motels in Palo Alto for those travelling by automobile. For those who wish hotel accommodations, the Hotel President, Palo Alto, is recommended.

PROGRAM OF THE SESSIONS

(Time limit for each contributed paper, 10 minutes)

SATURDAY, 10:00 A.M.

Session for contributed papers, Room 90, Philosophy Building

(1) Separable representations of purely infinite algebras. Preliminary report

Dr. J. M. G. Fell, California Institute of Technology

(2) On the structure of C^* algebras

Mr. R. T. Prosser, University of California, Berkeley

(3) Arithmetic and limit theorems for a class of random variables
Professor Edwin Hewitt and Professor H. S. Zuckerman, University of Washington

(4) Bounds for the variance of the U-statistic in terms of $p = \text{prob.}\{Y < X\}$
Professor Z. W. Birnbaum, University of Washington, and Professor O. M. Klose, Seattle University

(5) A general solution of $dz = pdx + qdy$ with application to partial differential equations
Mr. R. D. Gordon, Redwood City, California

(6) A Newton-Raphson method for systems of equations
Professor W. L. Hart, University of Minnesota, and Professor T. S. Motzkin, University of California, Los Angeles

(7) Elimination theory for algebraic inequalities
Professor T. S. Motzkin, University of California, Los Angeles

(8) Second order recurrences over p-adic fields
Professor Morgan Ward, California Institute of Technology

(9) A necessary and sufficient condition for an α-complex Boolean algebra to be an α-homomorphic image of an α-complete field of sets
Mr. C. C. Chang, University of California, Berkeley

SATURDAY 2:00 P.M.

General Session, Room 90, Philosophy Building

Operator algebras (One hour)
Professor Irving Kaplansky, University of Chicago and University of California, Los Angeles

SUPPLEMENTARY PROGRAM
(To be presented by title)

(10) Notes on some scheduling problems
Professor J. R. Jackson, University of California, Los Angeles

(11) Power-associative rings of characteristic two.
Professor L. A. Kokoris, University of Washington

(12) Some conditions under which genera of indefinite ternary quadratic forms exist which contain more than one class
Dr. P. J. McCarthy, University of Notre Dame

(13) A general dimension function for W^* algebras
Mr. R. T. Prosser, University of California, Berkeley

(14) Transitive holonomy groups
Professor I. M. Singer, Columbia University and University of California, Los Angeles

J. W. Green
Associate Secretary

Los Angeles, California
March 9, 1955

NEWS ITEMS AND ANNOUNCEMENTS

SUMMARY: A survey of research potential and training in the mathematical sciences is to be conducted... A colloquium on algebraic topology will be held in England... A conference on operations research will be held at Case Institute... The second part of the Third Berkeley Symposium on Mathematical Statistics and Probability will be held in the summer... An international symposium on electromagnetic wave theory is announced... The 1955 annual general meeting of the Association for Computing Machinery will be held in Philadelphia... A catalogue of automatic data recording equipment has been prepared... An ad hoc panel on university computing facilities has submitted recommendations to the National Science Foundation... Reports are available relating to the recent Survey on Training and Research in Applied Mathematics... The National Science Foundation announces the award of grants in mathematics... A note on the publication of course announcements in Society journals... A conference on partial differential equations will be held in Berkeley, California.

A SURVEY OF MATHEMATICS. The National Science Foundation is sponsoring a survey of research potential and training in the mathematical sciences. The aim of the survey is that of discovering by what means the mathematical strength of this country can be increased.

The survey will be conducted by the following COMMITTEE ON THE SURVEY:

A. A. Albert (Chicago), Chairman	J. W. Green (UCLA), Investigator
J. A. Clarkson (Tufts), Secretary	L. W. Cohen, NSF Liason Representative
Lipman Bers (NYU)	G. A. Hedlund (Yale)
W. L. Duren (Tulane and MAA)	M. S. Rees (Hunter)
Andrew Gleason (Harvard)	R. L. Wilder (Michigan and AMS)
	S. S. Wilks (Princeton)

The Committee was selected by the Executive Committee of the Division of Mathematics of the National Research Council at the request of Dr. L. W. Cohen, Program Director for Mathematics of the National Science Foundation. The proposed period for the survey is the 18 months period beginning January 1, 1955. The activities of the Committee will be supported by a grant already made by the National Science Foundation to the Department of Mathematics of the University of Chicago.

An organizational meeting of the Committee was held in Washington on January 29 and 30, 1955. The Committee agreed at that meeting to emphasize the study of the following questions:

1. What are the factors in undergraduate colleges which make some

schools outstandingly successful in the training of prospective mathematicians? What factors attract students to a mathematical career?

2. What are the elements of university and other institutional environments which encourage or hinder the production of research and the development of the mathematician?

3. What is the amount of financial support now being given mathematics? What is an accurate estimate of the future needs of departments of mathematics with respect to staff, facilities, libraries, etc.? What are the possible problems which might arise through the creation of numbers of mathematicians employed by universities with federal funds and without tenure?

4. How may graduate students be distributed to training centers in an efficient and equitable manner?

5. How may the difficult problem of the support of mathematical publication be solved?

6. What are the present career opportunities for mathematicians in industry and government and what is the best way to make these opportunities known to high school students?

The Committee has created five subcommittees to concentrate on various aspects of these questions. The subcommittees and their chairmen are:

1. Subcommittee on undergraduate colleges (G. A. Hedlund)
2. Subcommittee on research environment (R. L. Wilder)
3. Subcommittee on mathematical manpower (W. L. Duren)
4. Subcommittee on non-teaching opportunities (M. S. Rees)
5. Subcommittee on publications (Lipman Bers)

The full membership of these committees will be announced at a later date.

The success of the survey will obviously depend in a fundamental way on the cooperation with the Committee given by the mathematical community. Improvements in training and research environment are surely not merely a question of lack of funds. Once the facts are known it may be possible to obtain substantial improvements simply by reorganization of objectives. Many departments have suppressed desires which have been suppressed only because of a lack of funds. These desires should be brought out. Departments are earnestly requested to make careful studies of their needs and to have the results of their study available when requested. Departments and individual mathematicians may anticipate the receipt of questionnaires and visits from the Survey Investigator or members of the Committee during the next year. It is

hoped that through the enthusiastic cooperation of the mathematical community the Committee can obtain the facts which are potentially of great influence in mapping the future of mathematics in the United States.

The headquarters of the survey will be the Department of Mathematics of the University of Chicago. Anyone having suggestions which might be of value to the survey is invited to transmit them to Professor A. A. Albert, Department of Mathematics, The University of Chicago.

A COLLOQUIUM ON ALGEBRAIC TOPOLOGY will be held at Oxford, England, on June 30–July 1, 1955. The colloquium is to be sponsored by the International Mathematical Union. Professor J. H. C. Whitehead is Chairman of the Organizing Committee.

A CONFERENCE ON OPERATIONS RESEARCH will be held at Case Institute of Technology from April 5 to April 7, 1955. The conference program will be directed towards business and industrial leaders interested in the application of scientific methods and techniques to their problems. The fee for attendance at the conference is $100.00 and includes meals and conference proceedings. Registration applications and inquiries should be directed to Dr. E. Leonard Arnoff, Operations Research Group, Engineering Administration Department, Case Institute of Technology, Cleveland 6, Ohio.

THIRD BERKELEY SYMPOSIUM ON MATHEMATICAL STATISTICS AND PROBABILITY. The Society is co-sponsoring the second part of the Third Berkeley Symposium on Mathematical Statistics and Probability. Professors J. L. Doob and George Pólya were appointed by the President to represent the Society in the organization of the meeting.

The first part of the Symposium, emphasizing applications, was held in Berkeley during the last week of December, 1954, in conjunction with the Annual Meeting of the American Association for the Advancement of Science. The second part, emphasizing theory, will be held in the summer of 1955. Intended to provide an opportunity for unhurried, informal contacts between the participants, as well as for presentation of papers, the second part of the Symposium is meant to be a less crowded affair and will extend over July and August.

Those invited to take an active part in the second part of the Third Berkeley Symposium include: T. W. Anderson, M. S. Bartlett, D. Blackwell, A. J. L. Blanc-Lapierre, K. L. Chung, H. Cramér, J. L. Doob, A. Dvoretzky, W. Feller, R. Fortet, M. A. Girshick, J. M. Hammersley, T. Harris, W. Hoeffding, Paul Lévy, H. Robbins, M. Rosenblatt, H. Rubin,

L. J. Savage, C. M. Stein, D. van Dantzig, B. L. van der Waerden.

Meetings of the Symposium will be open. Further details may be obtained by writing to the Statistical Laboratory, University of California, Berkeley. It is hoped that the *Proceedings of the Third Berkeley Symposium* will be published within a few months.

AN INTERNATIONAL SYMPOSIUM ON ELECTROMAGNETIC WAVE THEORY will be held on June 20 through June 25, 1955 at the University of Michigan, Ann Arbor, Michigan. The Symposium is sponsored by Commission VI of URSI (The International Scientific Radio Union), and the University of Michigan. The symposium will be devoted to the following major topics:

1. Propagation in doubly refracting media in wave guides,
2. Boundary value problems of defraction and scattering theory,
3. Contributions in antenna theory of fundamental importance,
4. Forward scattering,
5. Multiple scattering.

The program will consist of invited and contributed papers in any of the above or related topics. Those who wish to present papers at the meetings should submit abstracts (not more than 200 words) to K. M. Siegel, Symposium Chairman, Willow Run Research Center of the Engineering Research Institute, University of Michigan, Ypsilanti, Michigan, by March 31, 1955.

THE 1955 ANNUAL GENERAL MEETING OF THE ASSOCIATION FOR COMPUTING MACHINERY will be held at the Moore School of Electrical Engineering, University of Pennsylvania, on September 14–16. As in the past, this meeting is intended to serve as a place for the reporting of new ideas in computer technology and of new developments in the applications of computing machinery.

A CATALOGUE OF PRESENTLY AVAILABLE AUTOMATIC DATA RECORDING EQUIPMENT has been prepared by the Armour Research Foundation of Illinois Institute of Technology. The project was supported ed by the Air Force. The catalogue is a 74-page booklet which describes the operation and manufacturers' specifications of 70 data recording instruments. The catalogue may be of interest to those who are following the development of automatic computing devices.

AN AD HOC PANEL ON UNIVERSITY COMPUTING FACILITIES, convened recently by the National Science Foundation, has recommended

to the Foundation that it should entertain proposals from universities, or from regional groups of universities, for grants to set up modern computation laboratories. The grants would be predicated on the assumption that a proportion of operating costs would be assumed by the proposers. The expansion and modernization of existing facilities was not ruled out in the recommendations.

It was contemplated that each proposal should be primarily concerned with providing scientists interested in basic research in the organization submitting the proposal with adequate access to the computing facility, and with providing instruction in numerical analysis and computational procedure in order to increase the supply of manpower trained in computation. Assistance in the technique of numerical analysis should be available to faculty members interested in computing. It was suggested that there should be a faculty committee to screen problems to be computed, with a view to maintaining the basic character of the work of the facility.

It was envisioned that the senior members of the staff of the facility would have faculty status, that there would be no direct external sale of computing time, and that there might be internal charges for computation performed by members of departments of the university or group.

THE SURVEY ON TRAINING AND RESEARCH IN APPLIED MATHEMATICS which has been conducted during the past two years by the Division of Mathematics of the National Research Council under contract with the National Science Foundation has now been completed. Two conferences were organized as a part of this survey and proceedings have been published. The first of these was the Symposium on Special Topics in Applied Mathematics, proceedings of which appeared as No. 3 of the Herbert Elsworth Slaught Memorial Papers published by the Mathematical Association of America. Copies are obtainable at a cost of $1.00 from Professor H. M. Gehman, Department of Mathematics, University of Buffalo. Proceedings of the other conference, on Training in Applied Mathematics, are being distributed by the National Science Foundation, as is also the final report of the Survey. Requests for copies should be addressed to Dr. L. W. Cohen, Program Director for Mathematics, National Science Foundation, 1520 8th Street, N. W., Washington 25, D. C.

THE NATIONAL SCIENCE FOUNDATION HAS ANNOUNCED GRANTS IN MATHEMATICS to the following institutions to support studies by the indicated mathematicians: Brown University, Herbert Federer and W. S. Massey; Carnegie Institute of Technology, Alfred Schild; Dartmouth College, J. G. Kemeney; Illinois Institute of Technology,

Gerald Berman; Morgan State College, L. I. Mishoe; New York University, Avron Douglis; Oberlin College, J. D. Baum; Oklahoma Agricultural and Mechanical College, E. W. Titt; University of California, Berkeley, Jerzy Neyman, Alfred Tarski; University of Georgia, M. K. Fort, Jr; University of Illinois, A. H. Taub; University of Southern California, Herbert Busemann; University of Tennessee, Wallace Givens; University of Michigan, M. O. Reade, E. E. Moise; University of Minnesota, Hidehiko Yamabe; University of Wisconsin, R. H. Bing.

A NOTE FROM THE EDITOR OF THE NOTICES CONCERNING THE PUBLICATION OF ANNOUNCEMENT OF COURSES. It has been the policy of the Society not to publish announcements of courses in either the *Bulletin* or *Notices*. The policy relates to both special programs (as for example, special summer sessions with visiting lecturers) and regular academic schedules of courses. In carrying out the policy, a number of borderline cases keep arising in the form of occasional seminars, and other special courses which seems to have some of the characteristics of symposia or conferences. These borderline cases are being resolved with a bias toward publication. It should be observed that the *American Mathematical Monthly* has recently been publishing announcements of advanced courses in mathematics to be given during summer sessions.

A CONFERENCE ON PARTIAL DIFFERENTIAL EQUATIONS will be held at the University of California, Berkeley, California, on June 20 to July 1, 1955. It is to be sponsored jointly by the University of California, the University of Kansas, and the Office of Naval Research. The topics to be covered are (1) non-linear differential equations, (2) linear elliptic equations, (3) linear hyperbolic equations, and (4) approximation methods. A limited number of scholarships are being offered in connection with the conference. They will be made available to young mathematicians.

For further information write to F. Wolf, Department of Mathematics, University of California, Berkeley 4, California.

PERSONAL ITEMS

Mr. D. L. Arenson of the Cook Research Laboratory, Skokie, Illinois, has accepted a position as manager of the Ex-Cel Development Company, Chicago, Illinois.

Mr. W. R. Brittenham of the University of Wisconsin has accepted a position as mathematician with the A. O. Smith Corporation, Milwaukee, Wisconsin.

Mr. E. P. Graney of the Ramo-Wooldridge Corporation has gone into business as a consultant in digital computer programming in Ann Arbor, Michigan.

Dr. D. G. Higman of McGill University has been appointed to an associate professorship at Montana State University.

Assistant Professor S. P. Hughart of the University of Chicago has been appointed to an assistant professorship at Sacramento State College.

Dr. Jack Indritz of the University of Minnesota has been appointed to an assistant professorship at Washington University.

Dr. E. N. Lorenz of the Massachusetts Institute of Technology is on leave and has been appointed to a visiting associate professorship of meteorology at the University of California, Los Angeles.

Dr. R. V. Mendenhall of North American Aviation, Inc., Columbus, Ohio has accepted a position as senior mathematician with the Vitro Laboratories, Inc., Eglin Air Force Base, Florida.

Dr. J. E. L. Peck of the University of Natal, Durban, South Africa, has been appointed to an assistant professorship at the University of New Brunswick.

Associate Professor Lucille K. Pinette of Colby College is on leave at the University of Michigan.

Dr. B. A. Rattray of Princeton University has been appointed to an assistant professorship at McGill University.

Dr. E. K. Ritter of the U. S. Naval Proving Ground, Dahlgren, Virginia, has accepted an appointment as professor and Director of the Rich Electronic Computer Center at the Georgia Institute of Technology.

Dr. Claude A. Rogers of the University of London has been appointed to a professorship at the University of Birmingham.

Dr. R. J. Silverman has been appointed to an assistant professorship at the Illinois Institute of Technology.

Mr. R. F. Smith of Syracuse University has been appointed to an assistant professorship at the University of Vermont.

Professor A. Helen Tappan of Western College, Oxford, Ohio, has retired.

Dr. J. W. Weihe of the University of California, Berkeley, has accepted a position as staff member with the Sandia Corporation.

The following promotions are announced.

P. T. Bateman, University of Illinois, to an associate professorship.

F. A. Behrend, University of Melbourne, to an associate professorship.

Elsie T. Church, Northwestern State College of Louisiana, to a professorship.

Avron Douglis, New York University, to an associate professorship.

Katharine E. Hazard, Douglass College, Rutgers University, to an associate professorship.

Ernest Ikenberry, Alabama Polytechnic Institute, to an associate professorship.

Louis Nirenberg, New York University, to an associate professorship.

Moses Richardson, Brooklyn College, to a professorship.

L. J. Savage, University of Chicago, to a professorship.

H. K. Sohl, U. S. Naval Academy, to an associate professorship.

Dr. Albert Wolinsky, Farrand Optical Co., New York, N. Y., to associate physicist.

The following appointments to instructorships are announced.

University of Buffalo: Dr. A. G. Fadell; University of Kansas: Mr. A. H. Kruse; San Diego State College: Dr. N. B. Smith; State College of Washington: Dr. Wilfred E. Barnes; University of Wisconsin: Dr. W. J. Coles.

Dr. G. A. Campbell of Upper Montclair, New Jersey, died on November 10, 1954 at the age of eighty-four years. He had been a member of the Society for fifty-four years.

Assistant Professor I. S. Cohen of the Massachusetts Institute of Technology died on February 14, 1955 at the age of thirty-seven years. He had been a member of the Society for eighteen years.

NEW PUBLICATIONS

Appell, P. *Traité de mécanique rationnelle.* Vol. 5. *Eléments de calcul tensoriel.* 2d ed. Paris, Gauthier-Villars, 1955. 202 pp. 3000 fr.

Applications scientifiques de la logique mathématique. Actes du 2e Colloque International de Logique Mathématique, Paris, 1952. Paris, Gauthier-Villars, 1954. 176 pp. 2,200 fr.

Bateman, H. See Erdélyi, A.

Becker, R. A. *Introduction to theoretical mechanics.* New York, McGraw-Hill, 1954. 13+420 pp. $8.00.

Bellman, R. *Dynamic programming of continuous processes.* Santa Monica, The Rand Corporation, 1954. 18+141 pp.

Bernšteĭn, S. N. *Sobranie sočineniĭ.* Vol II. *Konstruktivnaya teoriya funkciĭ* [1931–1953]. Moscow, Izdat. Akad. Nauk SSSR, 1954. 627 pp. 34.60 rubles.

Bodewig, K. E. *Die Inversion geodätischer Matrizen.* The Hague, Toegepast Natuurwetenschappelijk Onderzoek, 1954. 81 pp. (mimeographed).

Bol, G. *Projektive Differentialgeometrie.* Part 2. Göttingen, Vandenhoeck and Ruprecht, 1954. 372 pp. 27.50 DM.

Bourbaki, N. *Eléments de mathématique.* XVII. Part 1. *Les structures fondamentales de l'analyse.* Book I. *Théorie des ensembles.* Chapter I. *Description de la mathématique formelle.* Chapter II. *Théorie des ensembles.* (Actualités Sci. Ind., no 1212.) Paris, Hermann, 1954. 136 pp. 1500 fr.

Bunt, L. N. H. *Van Ahmes tot Euclides. Hoofdstukken uit de geschiedenis van de wiskunde.* [From Ahmes to Euclid. Chapters from the history of mathematics.] Groningen, Wolters, 1954. 7+171 pp. Paper, 4.90 florins; cloth, 5.50 florins.

Caratheodory, C. *Theory of functions of a complex variable.* Vol. 2. Trans. by F. Steinhardt. New York, Chelsea, 1954. 220 pp.

Celebrazione in lugo del centenario della nascita di Gregorio Ricci Curbastro, 2 maggio 1954. Ed. by the Liceo Scientificio Statale "Gregorio Ricci Curbastro", Lugo, 1954. 93 pp., 2 plates.

Contributions to the theory of partial differential equations. Papers read at the Conference on Partial Differential Equations, sponsored by the National Academy of Sciences, National Research Council, October, 1952. (Annals of Mathematics Studies, no. 33.) Princeton University Press, 1954. 8+257 pp. $4.00.

Cossa, P. *La cybernétique. Du cerveau humain aux cerveaux artificiels.* Paris, Masson, 1955. 100 pp., 13 figs. 525 fr.

Cramér, H. *On some questions connected with mathematical risk.* Berkeley and Los Angeles, University of California, 1954. 2+199–123 pp. $.50.

Harald

Dubreil, P. *Algèbre.* Vol. I. *Equivalences, opérations, groupes, anneaux, corps.* 2d ed. Paris, Gauthier-Villars, 1954. 467 pp. 3900 fr.

Dürr, K. *Lehrbuch der Logistik.* Basel, Birkhäuser, 1954. 8+181 pp. Paperbound, 19.80 Swiss fr.; clothbound, 22.90 Swiss fr.

Erdélyi, A., Magnus, W., Oberhettinger, F., and Tricomi, F. G. *Tables of integral transforms.* Vol. II. Based, in part, on notes left by Harry Bateman. New York, McGraw-Hill, 1954. 16+451 pp. $8.00.

Gelfond, A. O. *Die Auflösung von Gleichungen in ganzen Zahlen (Diophantische Gleichungen).* Berlin, Deutscher Verlag der Wissenschaften, 1954. 59 pp.

Gelfond, A. O. *Ganzzahlige Lösungen von Gleichungen.* Munich, Oldenbourg, 1954. 59 pp. 7.80 DM.

Gloden, A. *Résolution de l'équation intégrale de Fredholm de seconde espèce dans le cas des noyaux d'ordre fini. (Introduction à l'étude des équations intégrales.)* Luxembourg, 1954. 30 pp. 100 Belgian fr.

Goudet, G. *Les fonctions de Bessel et leurs applications en physique.* 2d ed. Paris, Masson, 1954. 90 pp. 600 fr.

Hobson, E. W. *The theory of spherical and ellipsoidal harmonics.* New York, Chelsea, 1955. 11+500 pp.

Janet, M. *Précis de calcul matriciel et de calcul opérationnel.* Paris, Presses Universitaires de France, 1954. 8+222 pp. 1800 fr.

Julia, G. *Cours de géométrie infinitésimale.* Vol 2. *Cinématique et géométrie cinématique.* Part 1. *Généralités.* 2d ed. Paris, Gauthier-Villars, 1955. 80 pp. 1500 fr.

Kibel, I. A. See Kotschin, N. J.

Kil'čevskiĭ, N. A. *Elementy tenzornogo isčisleniya i ego priloženiya k mehanika.* Moscow, Gosudarstv. Izdat. Tehn.-Teor. Lit., 1954. 167 pp. 5.15 rubles.

Kotschin, N. J., Kibel, I. A., and Rose, N. W. *Theoretische Hydromechanik.* Vol. I. Berlin, Akademie-Verlag, 1954. 12+508 pp. 45.00 DM.

Lawden, D. F. *Mathematics of engineering systems (linear and non-linear).* New York, Wiley, 1954. 8+380 pp. $5.75.

Loève, M. *Probability theory. Foundations. Random sequences.* New York, Van Nostrand, 1955. 15+515 pp. $12.00.

Lösch, F. *Siebenstellige Tafeln der elementaren transzendenten Funktionen.* Berlin, Springer, 1954. 8+335 pp. 49.80 DM.

Magnus, W. See Erdélyi, A.

Mathematical thinking in the social sciences. Glencoe, Ill., The Free Press, 1954. 444 pp. $10.00.

Miller, F. H. See Reddick, H. W.

Miller, K. S. See Murray, F. J.

Mitrinović, D. S. *Zbirka zadataka iz matematike za studente tehničkih i prirodno-matematičkih fakulteta.* [Collection of problems in mathematics for students of engineering and science-mathematics faculties.] Belgrade, Znanje, 1954. 175 pp.

Murray, F. J., and Miller, K. S. *Existence theorems for ordinary differential equations.* New York University Press, 1954. 10+154 pp. $5.00.

Oberhettinger, F. See Erdélyi, A.

Petrovsky, I. G. *Lectures on partial differential equations.* Trans. by A. Shenitzer. New York, Interscience, 1954. 10+245 pp. $5.75.

Raymond, F. H. *Le calcul analogique. Principes et contribution à une théorie générale.* Torino, Rosenberg and Sellier, 1954. 134 pp. 2000 Lire.

Reddick, H. W. and Miller, F. H. *Advanced mathematics for engineers.* 3d ed. New York, Wiley, 1955. 14+548 pp. $6.50.

Rédei, L. *Algebra.* Vol. I. Budapest, Akadémiai Kiadó, 1954. 642 pp. 110 ft.

Rocard, Y. *L'instabilité en mécanique. Automobiles, avions, ponts suspendus.* Paris, Masson, 1954. 8+239 pp., 4 plates. 1200 fr.

Rose, N. W. See Kotschin, N. J.

Shenitzer, A. See Petrovsky, I. G.

Steinhardt, F. See Caratheodory, C.

Swainger, K. *Analysis of deformation.* Vol. 2. *Experiment and applied theory.* London, Chapman and Hall, 1954. 36+365 pp. 70 s.

Szőkefalvi-Nagy, B. *Valós függvények és függvénysorok.* [Real functions and series of functions.] Budapest, Tankönyvkiadó, 1954. 307 pp. 42.50 ft.

Table of salvo kill probabilities for square targets. (National Bureau of Standards Applied Mathematics Series, no. 44.) Washington, Government Printing Office, 1954. 9+33 pp. $0.30.

Tables of functions and of zeros of functions. (National Bureau of Standards Applied Mathematics Series, no. 37.) Washington, Government Printing Office, 1954. 9+211 pp. $2.25.

Tables of the error function and its derivative $H(x) = (2/\sqrt{\pi}) \int_0^x e^{-\alpha^2} d\alpha$ *and* $H'(x) = (2/\sqrt{\pi}) e^{-x^2}$. (National Bureau of Standards Applied Mathematics Series, no. 41.) Washington, Government Printing Office, 1954. 11+302 pp. $3.25.

Tolfte Skandinaviska Matematikerkongressen, Lund, 1953. Lunds Universitets Matematiska Institution, 1954. 337 pp. 25 Swedish crowns.

Tricomi, F. G. See Erdélyi, A.

Wald, A. *Selected papers in statistics and probability.* New York, McGraw-Hill, 1955. 10+702 pp. $8.00.

DIRECTORY CHANGES

Any member of the Society who has not informed the Providence Office of changes in position or rank should fill out the form below and send it to the Providence Office. In particular, if there are errors in your listing in the 1954 Directory, it would be appreciated if they are called to our attention now.

Changes in mailing address must be reported at least *thirty days* before the change becomes effective, in order to avoid the payment of forwarding postage on your journals. Such changes should also be reported on the form below.

.....

Name in full .....
(Please print) Last First Middle or Maiden

( ) Mr. ( ) Miss ( ) Mrs. .....
Husband's Initials

Highest earned degree .....

My regular employer is .....

Address of this employer is .....

.....

My regular position is .....
Organizational title and rank

I was appointed to this position in .....
Year of present rank

But at present I have a temporary position with:

..... as .....
Employer Organizational title and rank

The mailing address for my journals UNTIL FURTHER NOTICE is as follows: .....

.....

AMERICAN MATHEMATICAL SOCIETY
80 Waterman Street
Providence 6, Rhode Island

Entered as second class
matter at the postoffice
at Menasha, Wisconsin

Return Postage Guaranteed